

Serial No. 10/811,515
Page 2 of 11

Response

Amendments to the Claims

Please amend the claims as follows:

1. (Previously Presented) A slide mechanism for mounting a tie-down assembly on a trailer, comprising:

an elongated member having an axial length and a box-shaped beam defining a hollow interior, the elongated member, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and

a channel disposed parallel to and in communication with the slot, the channel having a width that exceeds the gap width of the slot; and

a carriage bolt having a head and an elongated neck, the head having a width exceeding the gap width of the slot;

wherein:

the box shaped beam includes a top wall and a bottom wall, and a pair of side walls;

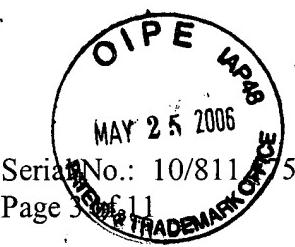
the elongated member further includes an elongated rail portion extending vertically from and generally aligned with one of the side walls of the beam;

the channel is configured to receive and maintain the carriage bolt head adjacent to the slot; and

the carriage bolt neck is configured to couple the tie-down assembly to the slide mechanism.

Claims 2-6 (Cancelled).

7. (Previously Presented) The slide mechanism of claim 1, wherein the top wall of the elongated member includes the slot and the channel disposed therein.



Serial No.: 10/811,475
Page 3 of 11

Response

8. (Currently Amended) The slide mechanism of claim 1, wherein the side wall of the box shaped beam [is aligned with the rail member and] includes the slot and the channel disposed along the side wall is aligned with the rail portion.

Claim 9 (Cancelled).

10. (Previously Presented) The slide mechanism of claim 1, wherein the elongated member includes a generally U-shaped plate having a first leg and a second leg and a top portion therebetween, and wherein a free end of each of the first leg and the second leg has a pair of winged end portions configured to couple with the trailer.

11. (Previously Presented) The slide mechanism of claim 10, wherein the slot and the channel are disposed along the top portion of the U-shaped plate.

12. (Previously Presented) The slide mechanism of claim 1, wherein the elongated member includes a vertical support disposed underneath the channel.

Claims 13-17 (Cancelled).

18. (Previously Presented) The slide mechanism of claim 1, wherein the elongated member includes a male adapter having a pair of downward extending lips.

19. (Previously Presented) The slide mechanism of claim 18, wherein the elongated member includes a female adapter having a generally U-shaped channel having a first leg coupled to the elongated member and a second leg, wherein the first and the second legs of the U-shaped channel are configured to receive one of the pair of downward extending lips of the male adapter, and wherein the pair of lips of the male adapter define a gap configured to receive the second leg of the U-shaped female adapter.

20. (Previously Presented) The slide mechanism of claim 1, wherein the elongated member includes a T-shaped vertical support disposed underneath the channel.

21. (Currently Amended) The slide mechanism of claim 1, wherein [the elongated member includes a beam having a top wall and a bottom wall and a pair of side walls, wherein] the slot is disposed along one of the side walls, and wherein the beam includes a first interior passage disposed between the channel and the top wall and a second interior passage disposed between the channel and the bottom wall.

22. (Previously Presented) The slide mechanism of claim 21, wherein the top and the bottom walls extend beyond the side wall to receive the tie-down assembly.

23. (Previously Presented) A trailer frame for transporting a load, the trailer frame supported on an axle and a pair of wheels, comprising:

a tie-down assembly configured to secure the load; and
a slide mechanism configured to slidably couple the tie-down assembly to the trailer frame, the slide mechanism including:

an elongated member having an axial length, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and

a channel disposed in communication with the slot, the channel having a width that exceeds the gap width of the slot; and

a carriage bolt with a head having a width that exceeds the gap width of the slot;

wherein:

the channel is configured to maintain the carriage bolt head adjacent to the slot; the carriage bolt is configured to receive the tie-down assembly; and the tie-down assembly includes:

a ring having a linear portion, and

a mounting plate configured to couple the ring to the slide mechanism, the mounting plate including a raised portion configured to receive the linear portion of the ring and an opening to receive the carriage bolt.

Claims 24-26 (Cancelled).

27. (Withdrawn) The trailer frame of claim 23, wherein the tie-down assembly includes:

a side frame;

a pair of support arms, each arm having a first end coupled to the side frame and a second end;

a mounting plate having at least one opening configured to receive the carriage bolt of the slide mechanism;

a tube having a cylindrical surface integrated with the mounting plate; and

a pivot pin configured to couple the second end of the support arm to the tube and the mounting plate.

28. (Withdrawn) The trailer frame of claim 23, wherein the trailer frame includes a first side and a second side, and wherein the slide mechanism extends perpendicular with respect to the first and the second sides.

29. (Withdrawn) The trailer frame of claim 23, wherein the tie-down assembly includes:

a plate member having an angled portion coupled to a base portion, the base portion having at least one opening to receive a carriage bolt coupling the tied down assembly to the slide mechanism, and wherein the angled portion includes an opening and a rounded free end.

Claims 30-32 (Cancelled).

33. (Withdrawn) The trailer frame of claim 23, wherein the tie-down assembly includes a bumper having an opening to receive the carriage bolt of the slide mechanism.

Claim 34 (Cancelled).

35. (Withdrawn) The trailer frame of claim 23, wherein the elongated member of the slide mechanism is a bunk pad, and wherein the tie-down assembly includes a bunk coupled by the carriage bolt to the slide mechanism.

Claim 36. (Cancelled).

37. (Previously Presented) A slide mechanism for mounting a tie-down assembly on a trailer, comprising:

an elongated member having an axial length, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and

a channel disposed parallel to and in communication with the slot, the channel having a width that exceeds the gap width of the slot; and

a carriage bolt having a head and an elongated neck, the head having a width exceeding the gap width of the slot;

wherein:

the channel includes a round-shaped portion configured to receive a round-shaped head portion of the carriage bolt and maintain the carriage bolt head adjacent to the slot; and

the carriage bolt neck is configured to couple the tie-down assembly to the slide mechanism.

Claims 38-39 (Cancelled).

40 (Previously Presented) A trailer frame for transporting a load, the trailer frame supported on an axle and a pair of wheels, comprising:

a tie-down assembly configured to secure a load; and

a slide mechanism configured to slidably couple the tie-down assembly to the trailer frame, the slide mechanism including:

an elongated member having an axial length, including:

a slot extending the axial length of the elongated member, the slot having a gap width; and

a channel disposed in communication with the slot, the channel having a width that exceeds the gap width of the slot; and

a carriage bolt with a head having a width that exceeds the gap width of the slot;

wherein:

the channel is configured to maintain the carriage bolt head adjacent to the slot; the carriage bolt is configured to receive the tie-down assembly; and

the tie-down assembly includes a post coupled to an L-shaped mounting plate with an opening configured to receive the carriage bolt.

41. (Previously Presented) A trailer frame for transporting a load, the trailer frame supported on an axle and a pair of wheels, comprising:

a tie-down assembly configured to secure a load; and

a slide mechanism configured to slidably couple the tie-down assembly to the trailer frame, the slide mechanism including:

an elongated member having an axial length, including:

a slot extending the axial length of the elongated

member, the slot having a gap width; and

a channel disposed in communication with the slot,

the channel having a width that exceeds the gap

width of the slot; and

a carriage bolt with a head having a width that exceeds the gap width of the slot;

wherein:

the channel is configured to maintain the carriage bolt head adjacent to the slot;

the slide mechanism is mounted along the side of the trailer frame;

the tie-down assembly includes a spare tire assembly having a mounting plate with at least one opening configured to receive the carriage bolt and slidably couple the tie-down assembly to the slide mechanism; and

the carriage bolt is configured to receive the tie-down assembly.